

The Cincinnati Tool Company

4037 Main Ave., Cincinnati, Ohio

Manufacturers of

Clamps and Other High Grade Mechanic's Tools

Since 1879 HARGRAVE CLAMPS have played an obscure but important part in American industrial development. Few tools indeed can boast a record as impressive. Fifty years ago HARGRAVE CLAMPS were designed and constructed to be the finest clamps on the market. Since then a steady process of refine-

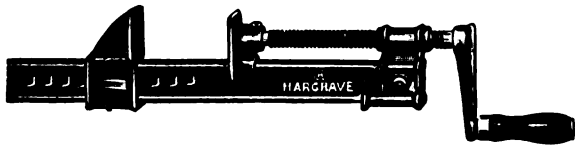


ment and improvement has increased their supremacy until today they are universally recognized by both craftsmen and production engineers as without rival.

The Cincinnati Line of Hargrave Clamps is complete and includes improved designs of every clamp used in woodworking or machine shop.

Improved "I" Bar Clamp

(Patented)



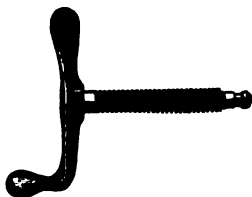
It is very powerful, having "I" shape high carbon steel bar $1\frac{1}{2} \times \frac{3}{4} \times \frac{1}{8}$ in. The screw is steel, $\frac{5}{16}$ in. diameter, with deep cut Acme thread and extra long bearing, giving great power and insuring long life to the Clamp. The tip has case hardened thrust bearing for the end of screw which practically eliminates wear. Crank, frame, tip and slide are of the best grade of malleable. Slide has tempered steel dog for engaging the notches, making it absolutely positive. Will not slip or stick. The notches do not weaken the bar as there is no metal removed and they are in the web.

Being spaced only $\frac{1}{2}$ in. apart, they permit rapid adjustment.

Furnished with All Metal "T" Crank Handle if desired. Available in the following sizes:

Opening—feet 2, $2\frac{1}{2}$, 3, $3\frac{1}{2}$, 4, $4\frac{1}{2}$, 5, 6.

(We manufacture both lighter and heavier Steel Bar Clamps and will be glad to send you catalog showing our complete line.)



This All Metal "T" Crank Handle can be furnished upon our Steel Bar Clamps or Clamp Fixtures, instead of the regular Cranks if preferred. However, regular Cranks as illustrated will be furnished unless the "T" Handle is specified.

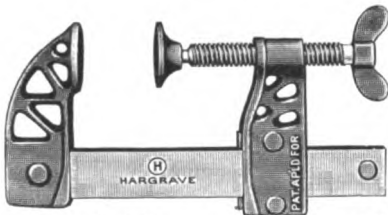
Quick Clamps (Patented)

Excellent general purpose clamps. Can be instantly applied or removed from the work; handier to operate, take up less room and save a great amount of time over ordinary clamps. Especially useful in pattern making, boat and ship building, and in automobile body and airplane work.

Rigid at any opening, thus overcoming the weakness of the long and easily bent screw of the old "C" Clamp. Will not slip or release when jarred.

The bar is high carbon manganese steel, rolled from our special analysis. Frame and foot are of the best grade of malleable. Their construction prevents side twist and enables the clamp to stand tremendous strain.

Furnished in any size opening and in any depth from 2" to 9".



The Standard Clamp

(Trade Name Registered)



Carriage

The Hargrave Standard Carriage Clamp is particularly favored by large manufacturers because of its superior strength and design. The frame is made of the best grade malleable iron, heavily reinforced and so shaped as to give

greatest strength for the metal used. The large diameter steel screw will not bend or break.

Furnished either with button tip or with oscillating tip.

Opening—inches $2\frac{1}{2}$ 3 4 5 6 7 8 10 12

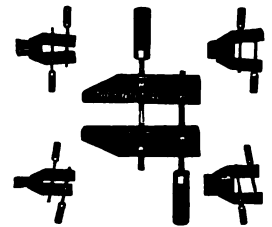
Depth—inches $1\frac{3}{4}$ $1\frac{7}{8}$ $2\frac{1}{8}$ $2\frac{1}{2}$ $2\frac{3}{4}$ 3 $3\frac{1}{4}$ $3\frac{3}{8}$ $3\frac{5}{8}$

(We manufacture both lighter and heavier pattern "C" Clamps and will be glad to furnish catalog showing our complete line.)

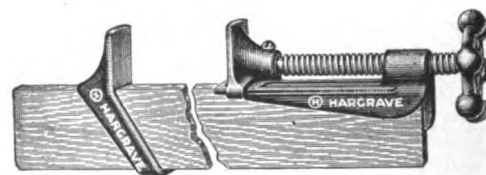
Steel Spindle Hand Screws

These Hand Screws have proven very popular in the schools. They are strong, durable and satisfactory. The jaws are selected hard maple. Spindles and bearings are steel. Spindles have deep cut Acme thread insuring long life to the bearings. Handles are fluted, giving good grip. Workmanship and materials are strictly first class, insuring long and satisfactory service. Made in both Adjustable and Non-Adjustable Patterns, in the following standard sizes:

Length of jaws	6	8	10	12	14	16	18
Opening	3	$4\frac{1}{2}$	6	$8\frac{1}{2}$	10	12	14



Clamp Fixtures



This illustration shows our No. 615 which fits $1\frac{1}{8} \times 2\frac{1}{4}$ in. bar. Made of malleable iron parts and steel screw. All Metal "T" Crank Handle furnished if desired.

Our No. 614 Clamp Fixture is somewhat heavier and fits 2×4 in. bar or smaller. It is furnished with regular crank with wood grip or with All Metal "T" Handle if preferred.

Catalog showing our complete line of Clamps, Chisels, Punches, Saw Vises and other tools being used extensively by Manual Training Schools will be mailed to you upon request.

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